



CALIFORNIA STATE ROUTE 128 TRANSPORTATION CONCEPT REPORT



The **Transportation Concept Report** (TCR) is a Caltrans long-range planning document that informs the regional transportation planning process. The TCR provides information regarding route segments, including high priority projects for the highway through 2035, and existing and forecasted traffic data. Projects identified in the TCR will require environmental and engineering studies before final approval and are subject to change.

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Stakeholder Acknowledgement

District 4 acknowledges the time and contribution of stakeholder groups and partner agencies:

- *Sonoma County Transportation Authority*
- *Napa County Transportation and Planning Agency*
- *Solano Transportation Authority*
- *Dry Creek Rancheria Band of Pomo Indians*

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Figure 1 – State Route 128 east of Rutherford

Photo: Robert Bregoff

1 - EXECUTIVE SUMMARY

State Route (SR) 128 is a rural, two-lane conventional highway that passes through primarily agricultural areas in Sonoma and Napa Counties and three-quarters of a mile of parkland in Solano County before crossing into Yolo County. The 120-mile minor arterial provides direct access to the towns of Cloverdale, Geyserville, Calistoga, St. Helena, Rutherford and Lake Berryessa Recreation Area. The highway is an important element of the economies of both Napa and Sonoma Counties as it provides access to local farms, wineries, and resorts. It is also the key access to the rancheria and casino of the Dry Creek Rancheria Band of Pomo Indians.

The concept for SR 128 is to remain a two-lane conventional highway for its entire length within District 4 (see Table 1). This concept is consistent with concepts developed for the adjacent segments of SR 128 to the west in Mendocino County (Caltrans District 1) and in Yolo County to the east (Caltrans District 3).

Projected growth in the corridor indicates that the existing two-lane highway will accommodate traffic demand over the 25-year planning horizon. Most of SR 128 traverses agricultural land, much of which is protected by agricultural trusts and preserves, limiting expansion of development and lateral growth of urbanized areas. Caltrans Smart Mobility Framework and Context-Sensitive Solutions principles emphasize the need to maintain the individual character and history of smaller towns and rural communities that largely make up this route.

Operational and safety issues will need to be addressed at the following intersections with SR 128: Petrified Forest Road, Conn Creek Road, Tubbs Lane, and SR 29 in Rutherford; also two intersections with the Silverado Trail, and access to Dry Creek Rancheria (DCR) at the Bureau of Indian Affairs (BIA) Highway 93 intersection. Some projects to improve conditions at these locations are already programmed; others are in the early planning stages. Bicycle and pedestrian access improvements should be accomplished consistent with local plans, existing land uses, and in coordination with local agencies.

An ongoing issue within the corridor is the instability of hillsides at several locations, especially in winter months.

Table 1 - SR 128 Corridor Concept Summary

Segment	Description	County	PM	PM	FACILITY-EXISTING	FACILITY-25 YR CONCEPT
A	SON/MEN LINE TO US 101	SON	0.00	4.80	2C*	2C
US 101 Alignment 10.18 Miles						
B	US 101 TO SON/NAP LINE	SON	4.80	24.76	2C	2C
C	SON/NAP LINE TO SR 29 I/S	NAP	0.00	4.56	2C	2C
SR-29 Alignment 12.3 Miles						
D	SR 29/SR 128 I/S TO SR 128/SR 121 I/S	NAP	4.56	19.09	2C	2C
E	SR 128/SR 121 I/S TO SOL/YOL LINE	NAP/ SOL	19.09	34.27	2C	2C

* 2C= two-lane conventional highway

Light green table rows signify a break in Route 128 where it shares an alignment with another State highway. Refer to corridor documents for these routes for corridor information and concept.¹

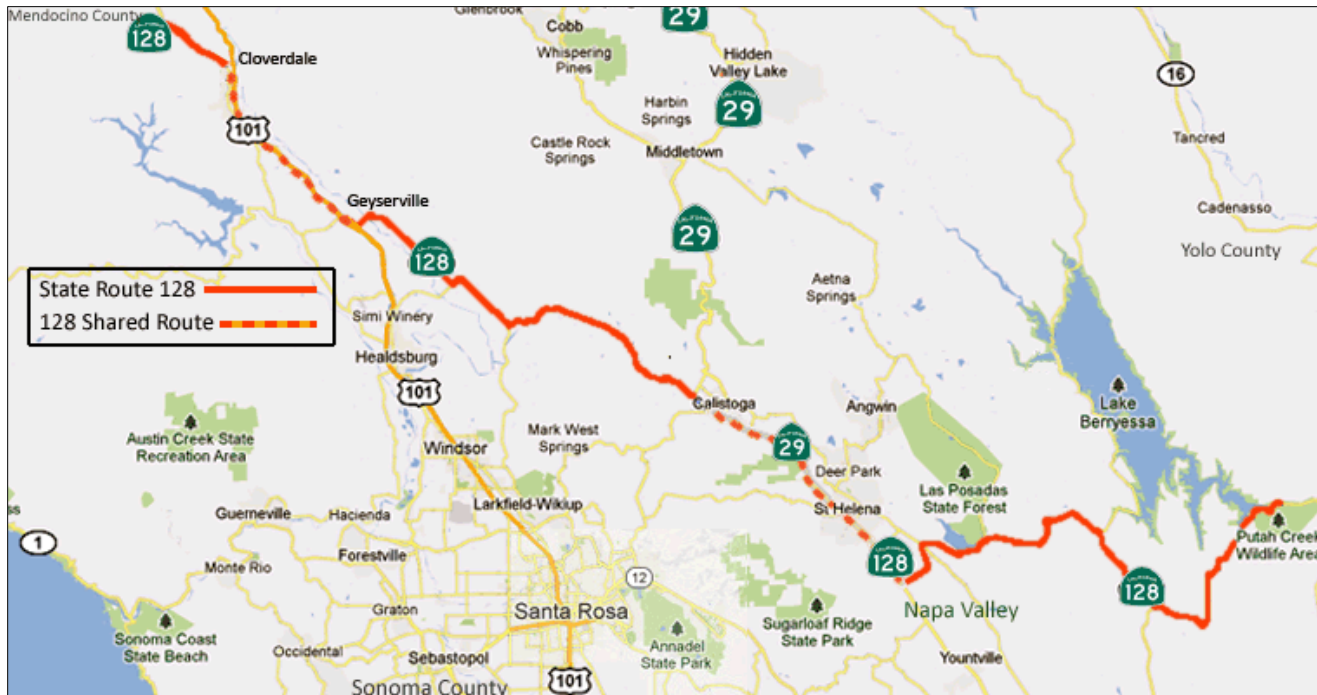


Figure 2 - State Route 128 in Caltrans District 4

Source: Google Maps

¹ See: http://www.dot.ca.gov/dist4/systemplanning/ctsp_documents.htm

2 - CORRIDOR PLANNING PROCESS

Transportation Concept Reports (TCRs) define the route concept or configuration for a State owned/operated facility with a 25-year planning horizon. This long-range planning report informs the regional transportation planning process and provides information on a route's characteristics and its interregional role in the State Highway System (SHS). This TCR describes corridor characteristics such as the existing transportation network and land use, and plans for the long-range corridor travel needs. It is not meant to be an encyclopedia of corridor information, but rather a statement on what the future facility should be to better manage projected travel demand. Any projects identified in the TCR require environmental and engineering studies before final approval.

TCRs are being developed for all 56 statutorily identified State routes in District 4. District 4 encompasses nine Bay Area counties: Alameda, Contra Costa, Solano, Napa, Sonoma, Marin, San Francisco, San Mateo, and Santa Clara.

While considering the transportation network of the corridor as a whole including other modes, Caltrans recognizes that its authority generally lies within the State Highway System. This report's major emphasis, therefore, is on State highway corridors.

PURPOSE AND NEED FOR A TCR

California's State Highway System (SHS) needs long-range planning to guide the logical development of transportation systems as required by law and as necessitated by the public, stakeholders, and system users. The purpose of the TCR is to evaluate current and projected conditions along the route and communicate the vision for the development of each route during a 20-25 year planning horizon. The TCR is developed to meet Department goals of increasing safety, improving mobility, providing excellent stewardship, and meeting community and environmental needs along the corridor through integrated management of the transportation network, including the highway, transit, pedestrian, bicycle, freight, operational improvements and travel demand management components of the corridor.

STATE'S INTERREGIONAL RESPONSIBILITY

The SHS serves interregional and regional travel demand. While this is not to preclude SHS access to specific destinations such as public facilities, major tourist attractions, or for local trips, development and modification of the SHS is conducted in the context of the mobility of regional and statewide to-and-through movement of people and goods.

CALIFORNIA SENATE BILL 45 (SB 45)

SB 45 (1997) stipulates that the State will nominate transportation improvements that facilitate the movement of people and goods between the State's 43 transportation regions as well as to and throughout the State. The State is responsible for developing highway system performance standards pertinent to accommodating interregional travel, and specifying corridor facility concepts that improve interregional travel on the State Highway System. The corridor concepts indicated in Transportation Concept Reports reflect the State's needs regarding the accommodation of interregional, regional, and local travel.

CALIFORNIA INTERREGIONAL BLUEPRINT (CIB)

Responding to Senate Bill 391 of 2009, the CIB informs and enhances the State's transportation planning process. Similar to requirements for regional transportation plans under Senate Bill 375, SB 391 requires the State's long-range transportation plan to meet California's climate change goals under Assembly Bill 32. In response to these statutes, Caltrans is preparing a state-level transportation plan targeted to meet CIB environmental goals.

TRANSPORTATION CONCEPT REPORT CONSISTENCY

A listing of federal, State, and regional transportation planning efforts and policies related to Transportation Concept Reports are included in the Appendices.

Several levels of government policy and direction guide TCR preparation. Applicable federal and State plans and regulations are:

- [Moving Ahead for Progress in the 21st Century Act \(MAP 21\)](#)
- [California Transportation Plan \(CTP\)](#) including Freight, Rail, and Aeronautics Plans
- Caltrans' [Interregional Transportation Strategic Plan](#)
- [State Highway Operation and Protection Program \(SHOPP\)](#), a program of maintenance, safety and rehabilitation improvements
- [State Transportation Improvement Program \(STIP\)](#), a multi-year capital improvement program of transportation projects
- [Interregional Road System \(IRRS\)](#) designations



Figure 3 - SR 128 at US-101 in Cloverdale

Photo: Andy Field, Alex Nitzman - AA Roads.com



Figure 4 - Vineyards, Napa Valley

Photo: Rob Bregoff

3 - CORRIDOR OVERVIEW

This chapter describes the SR 128 corridor. It describes the natural environment, towns, and communities along the corridor as well as adjacent land uses and major traffic generators. SR 128 is discussed in further detail in the five corridor segments.

Route Description

SR 128 traverses Mendocino, Sonoma, Napa, Solano and Yolo Counties. It is an important east-west route connecting SR 1 at the Pacific Ocean in Mendocino County, traversing through Sonoma County and the Napa Valley to Sacramento and the Central Valley. SR 128 is the only State highway north of Interstate 80 (I-80) that provides this connection. As an important goods movement link, SR 128 connects five major wine-growing regions: Anderson Valley, Alexander Valley, Dry Creek Valley, Napa Valley, and Carneros. Throughout its entire length, SR 128 is a two-lane conventional highway, federally classified as a Rural Minor Arterial and a designated component of the California Interregional Road System (IRRS).

The route begins at Route 1 near the mouth of the Navarro River at the Pacific Ocean. The highway traverses the coastal forests of Navarro River Redwoods State Park, the Anderson Valley, the Navarro River watershed, and climbs to Oat Valley before descending into the Russian River watershed. The District 4 section of the route begins at the Mendocino/Sonoma County line.

After crossing into Sonoma County, the road winds through Oat Valley for four miles to the town of Cloverdale. SR 128 then merges with US 101 and shares the alignment through the Alexander Valley. At Geyserville, after 10.18 miles, it diverges from US 101 and becomes Geyserville Avenue, the main route through the town of Geyserville and its business district. It then turns northeast, crosses Knights Valley, and enters Napa County from the northwest. It joins SR 29 at Calistoga, sharing its alignment for 12.3 miles. After passing through the town of St. Helena, SR 128 turns east from SR 29 at Rutherford and climbs eastward through the hills near Lake Berryessa. It then crosses the Napa/Solano County line, where it extends three-quarters of a mile before crossing into Yolo County at Putah Creek Bridge. There are a total of 24.8 miles within Sonoma County, 34.3 miles in Napa County, and three-quarters of a mile in Solano County.

The highway context is primarily rural, much of it viticulture. It traverses notably scenic terrain, much of it forested with California native oaks and redwoods. The route is not currently part of the Caltrans Scenic Highway program.²

After crossing into Yolo County, it continues east across Central Valley farmlands, eventually terminating in the town of Winters. The constructed portion ends at I- 505, but by legal definition continues 14 miles further east to SR 113 at I-80. The total length of the route is 120.52 miles. This report focuses on the portion of SR 128 within District 4 through Sonoma, Napa, and Solano Counties.

² Learn about the Scenic Highway Program here: http://www.dot.ca.gov/hq/LandArch/scenic/guidelines/scenic_hwy_guidelines.pdf

Table 2 - SR 128 System Characteristics

Functional Classification	Conventional highway
Freeway and Expressway System	No
Eligible for Scenic Highway Designation	No
Lifeline Route	No
STAA Truck Route	Only on the co-alignments with SR 29 and US 101
California Legal Advisory Route	Entire route, except for STAA sections
Strategic Highway Network	No
National Highway System	No
Interregional Road System	Yes (High Emphasis Route: NO, Focus Route: NO)
Public Airports Served	Cloverdale Municipal (no commercial air traffic)
Rail Service	None
Intercity Bus Service	Connections to Napa Vine Transit, Sonoma County Transit, Amtrak Thruway Coach
Intersecting State Highway Routes	US 101, SR 29, SR 121
Park and Ride Lots	Sonoma County: SR 128/Rommel Rd in Geyserville; Asti Road/Citrus Fair Drive in Cloverdale. Napa County: None

Community Characteristics

SR 128 connects five small rural towns as it spans agricultural land and open space in three counties. It skirts Cloverdale, the northernmost town of significance in Sonoma County. After following the US 101 alignment, SR 128 becomes Geyserville Avenue, the main street for Geyserville in the Alexander Valley.

East of Geyserville, SR 128 crosses the Russian River and continues toward the eastern foothills of the Alexander Valley. The highway follows the edge of the valley south, passing the 75-acre rancheria of the Dry Creek Band of Pomo Indians, also the location of their 62,000 square foot River Rock Casino. With over 600 employees, the Casino is one of the top 20 employers in the County, and one of the main traffic generators on the highway as well. SR 128 continues southeast through vineyards and forested lands before meandering eastward through the Maacama Hills and then turning southeast toward the Napa Valley.

The highway enters the town limits of Calistoga near Petrified Forest Road. Calistoga is the northernmost town in the Napa Valley. Average Annual Daily Traffic (AADT) is the highest in the entire corridor at this location as drivers from the Napa Valley and Lake County commute to jobs in Sonoma County.

Napa County's largest concentration of jobs is in the agricultural (typically wine) and hospitality industries. Given Calistoga's distance from the large Bay Area cities, tourists bound for the town are more likely to stay overnight than those who visit places further south in the Napa Valley. Calistoga's unique resort hotels have thermal baths and pools fed by nearby hot springs and geysers.

Other attractions are natural geysers, the fairgrounds, Calistoga's old-fashioned downtown area, restaurants, cafes, and wineries.

At the intersection of SR 29, SR 128 shares its alignment with SR 29 heading southeast, and serving as main street in the town of St. Helena (2010 pop. 5,800), then diverging from SR 29 to the east at Rutherford. From there SR 128 travels 2.8 miles northeast across the Napa Valley floor, intersects the Silverado Trail, and ascends into the mountains, passing Lake Hennessey, winding southerly through Sage Canyon, southern Pope Valley, Lake Berryessa Recreation Area, and finally Putah Creek State Wildlife Area. SR 128 then crosses the Napa/Solano County line (end of District 4) and continues through Solano and Yolo Counties (District 3), ending at Interstate 505.

Land Use

From the beginning of the route in Sonoma County outside of Cloverdale to the intersection at the Silverado Trail most of the land is in viticulture and wine production.

SR 128 between Cloverdale and the intersection of Chalk Hill Road roughly parallels the Russian River in an area called the Alexander Valley. Over 15,000 acres, half of Alexander Valley's land surface, are vineyards. There are over forty wineries and 130 grape growers in the Alexander Valley.

SR 128 is the main street of the town of Geyserville. Near the town is a geothermal facility owned by the Pacific Gas and Electric Company. Steam from fumaroles provides a sustainable power source for 1.1

million users. The facility was the first successful geothermal plant in the United States.

After Geyserville, the highway winds through the foothills of the Maacama Mountains, then into the Franz Valley. The road again winds through a few miles of oak and bay forested foothills to the Sonoma/Napa County line.

Descending into the Napa Valley, it meanders among the northernmost vineyards for 3.5 miles before arriving at the intersection of Petrified Forest Road, and the town of Calistoga.

SR 128 (here called Foothill Boulevard) enters the town from the northwest, skirts the western edge of the small downtown, then merges with SR 29.



Figure 5 - Roadside sign, Calistoga

Photo: Robert Bregoff

Southerly, SR 128 and 29 share an alignment as the road travels southeast through Napa County's prime winegrowing region. After crossing Silverado Trail, SR 128 becomes Sage Canyon Road and starts its climb into the dry foothills. Adjacent land is used for cattle grazing, some wineries, and contains groves of alder, oak, bay, manzanita, and other heat-tolerant scrub growth.

The road skirts Lake Hennessey, an integral part of the water supply for the city of Napa. It continues through the hills towards the Central Valley. Berryessa-Knoxville Road provides access to the recreational areas on the west side of Lake Berryessa. Monticello Road (SR 121) terminates at SR 128. The highway then follows the southeast edge of the Lake to Monticello Dam, which forms the Lake. This also marks the Napa/Solano County line. The final $\frac{3}{4}$ mile, in Solano County, shares similar conditions as Napa County and is documented in the same segment.

At Putah Creek Bridge, in Putah Creek State Wildlife Area, the highway passes into Yolo County, which is under the jurisdiction of [Caltrans District 3](#) (Link to District 3 SR 128 document).

For the purposes of analysis, SR 128 is divided into five segments. These segments represent portions of the route not shared with other State and federal numbered highways.

Route Segmentation

Segmentation is based on both built and geographical features. Changes in terrain, type or size of facility, county or city limits, or notable differences in use or capacity are selectively used to set limits to a segment.

Segments A and B are in Sonoma County, C and D are in Napa County and Segment E is mainly in Napa, except for the last $\frac{3}{4}$ mile, which is in Solano County. For information on alignments shared with SR 29, and US 101 please refer to those corridor documents on the Caltrans District 4 Planning website.³

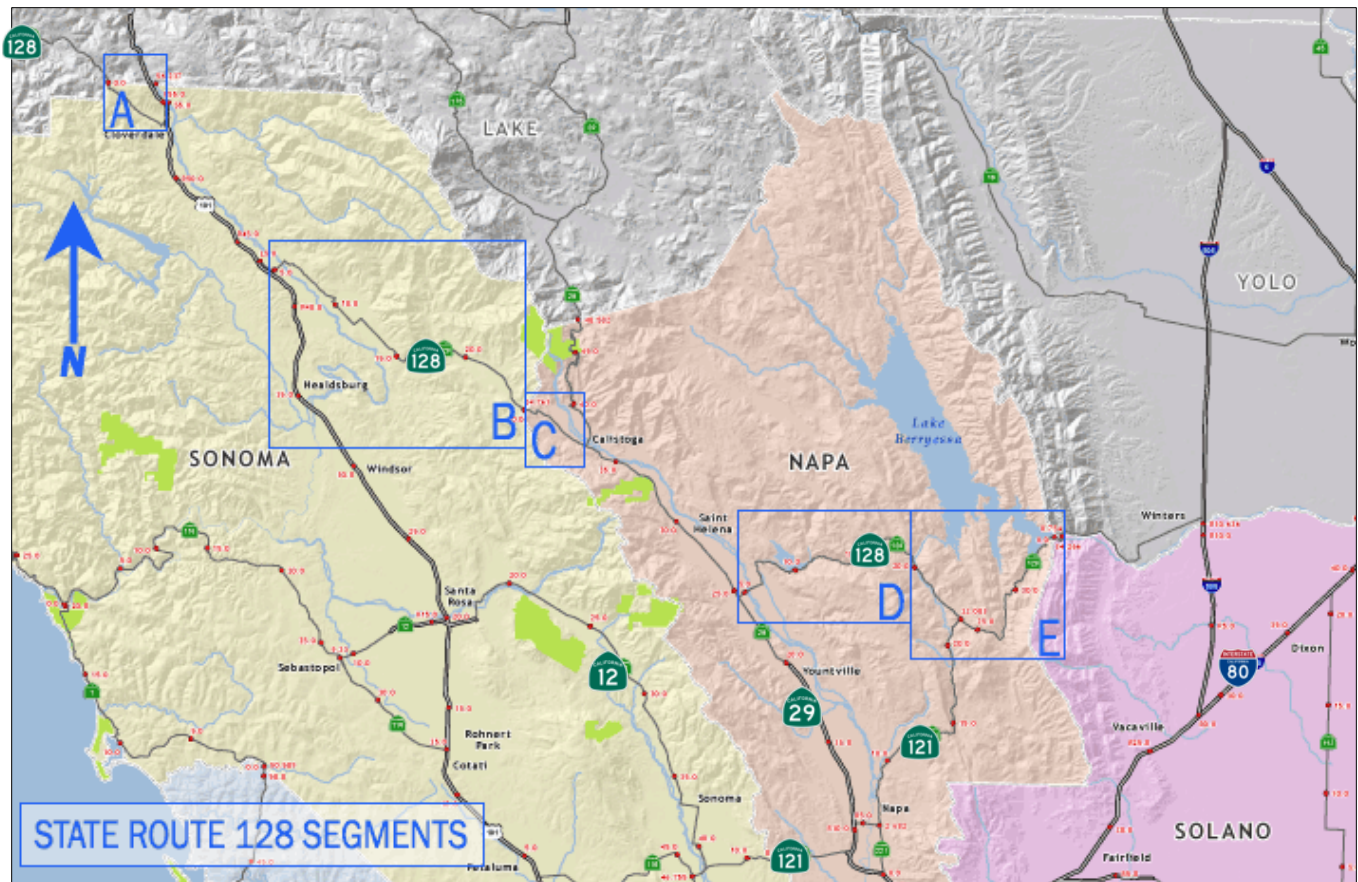


Figure 6 - SR 128 Route Segmentation

Source: Caltrans GIS

Table 3 - SR 128 Route Segmentation

Segment	Post Mile	County	Segment Description	Facility
A	0.00 – 04.86	SON	MEN/SON county line to US 101	2C*
B	4.86 – 24.76	SON	US 101 to SON/NAP county line	2C
C	0.00 – 04.56	NAP	SON/NAP county line to SR 29	2C
D	4.56 – 19.09	NAP	SR 29 to Knoxville Road	2C
E ⁴	19.09 – 34.27	NAP/SOL	Knoxville Road to SOL/YOL county line	2C

*2C = 2 Lanes, Conventional Highway

³ http://www.dot.ca.gov/dist4/systemplanning/ctsp_documents.htm

⁴The last three-quarters of a mile of Segment E are in Solano County

Segment A

CHARACTERISTICS

Segment A is a two-lane conventional facility from the Sonoma/Mendocino County line to US 101 in the town of Cloverdale. The terrain is in hilly, rural. As the highway continues towards Cloverdale through forested areas, surrounding areas become increasingly agricultural. The highway skirts the northern edge of Cloverdale before joining US 101. Segment A is less than five miles in length. For over half the segment, the road maintains a six percent or greater grade. The width of the traveled way is between 20 to 26 feet, shoulders are two to three feet wide. Hillside soil stability is an issue in this segment.

Segment A is the used by for Bay Area drivers as they head north to Booneville, Mendocino, Sea Ranch, and other North Coast destinations.

Sonoma County General Plan classifies Segment A as a Principal Rural Arterial.

PUBLIC TRANSPORTATION

Connections from SR 128 to transit exist in Cloverdale. It is the planned northern terminus of the Sonoma-Marín Area Rapid Transit (SMART) train, which will provide rail transit connections along the seventy-mile long US 101 corridor between Cloverdale and the Larkspur Ferry Terminal in Marin County. Sonoma County Transit buses and Amtrak Thruway Motor Coach service run in the US 101 corridor. There are no park-and-ride lots in this segment.

BICYCLE FACILITIES

There are no dedicated bicycle facilities throughout this segment. For the most part, there are no usable (paved or unpaved) shoulders, except turnouts, until the highway becomes North Redwood Highway in Cloverdale. Nearly one mile of North Redwood Highway has paved shoulders. Cloverdale is the planned northern terminus of the planned multi-use pathway, proposed to run parallel to Sonoma Marin Area Rapid Transit (SMART) train in the US 101 corridor.

PEDESTRIAN FACILITIES

There are no dedicated pedestrian facilities throughout this segment. For the most part, there are no usable (paved or unpaved) shoulders except for turnouts until the highway becomes North Redwood Highway in Cloverdale. An approximately one-mile section of North Redwood Highway has paved shoulders.

FREIGHT

The highway is the sole goods movement corridor between US 101 and Booneville, Anderson Valley farms and wineries, and coastal towns of Mendocino, Gualala, and Sea Ranch on SR 1 in Sonoma County. On average, 8.5% of the vehicles in this segment are trucks (average 205/day), 30.50% of these are five or more axles. This segment is a California Legal Advisory Route, a truck route classification that limits overall length to 75 feet.



Figure 7 - Panoramic view of Lake Berryessa

Photo: Wikimedia Commons

Segments B and C

CHARACTERISTICS

Segments B and C are two-lane conventional facilities that connect US 101 in Geyserville in Sonoma County with the town of Calistoga and SR 29 in Napa County ([see Figure 6](#)). The Sonoma/Napa County line divides the segments. Segment B provides access to the Dry Creek Rancheria and the Tribe's River Rock Casino.

In Geyserville, SR 128 (Geyserville Avenue) functions as the main street. The highway then meanders towards the southeast before reaching the Sonoma/Napa County line.

Segment C continues from the County line approximately 5 1/2 miles to the junction with SR 29 in Calistoga. SR 128 then intersects Tubbs Lane, which connects the route with SR 29 north of Calistoga. Increasing numbers of commuters and trucks from Lake County and other counties use Tubbs Lane and Petrified Forest Road to reach Sonoma County jobs and markets. By utilizing Tubbs Lane as an alternative to SR 29 through downtown Calistoga, drivers avoid delays caused by signals and tourist traffic.

The SR 128/Petrified Forest Road intersection has the highest traffic volumes in the entire corridor.

SR 128 shares its alignment with SR 29 for approximately 12.3 miles from Calistoga to the community of Rutherford, where it turns east.

Segment B is classified in the *Sonoma County General Plan* as a Rural Minor Arterial. Segments B and C provide access to the following destinations:

- Robert Louis Stevenson State Park
- Boethe-Napa Valley
- Bale Grist Mill Historic Site
- Alexander Valley wineries
- Napa Valley Wineries
- River Rock Resort and Casino



Figure 8 - Old Faithful Geyser, Calistoga
Photo: Wikimedia Commons

PUBLIC TRANSPORTATION

Napa VINE buses connect Calistoga and Rutherford in the shared SR 29/SR 128 alignment.

FREIGHT

Accessibility by trucks is important to agricultural industries, especially wineries.

Trucks represent five to six percent of the vehicular traffic in segments B and C, twenty-three to twenty-six percent of these are 5+ axles. Both segments are classified as California Legal Advisory Routes, which limits overall length to 75 feet.

It is important to note that at Tubbs Lane, the truck volume climbs to nearly eight percent, almost thirty percent of which are 5+ axles.

BICYCLE FACILITIES

There are no dedicated bicycle facilities in Segments B and C; bicyclists share the road with other vehicles and pedestrians. Paved shoulders vary from a few inches to about a foot and there is little or no unpaved shoulder area except occasional turnouts. Both segments are included in many cycling events, especially on

weekends and during the summer months. The Napa County Bicycle Coalition estimates that currently more than 10,000 riders a year use SR 128 in Napa County, mainly for recreation and event rides.

PEDESTRIAN FACILITIES

Except in Geyserville and Calistoga there are no shoulders or sidewalks other than turnouts and private driveways.

SR 128 connects US 101 to central Geyserville. There are areas of paved shoulders along the highway, but they are narrow in width and frequently parked with cars and trucks. SR 128 is the town's main street. Geyserville Avenue includes a narrow sidewalk on a portion of the west side of the street only. There is one yellow ladder crosswalk at Geyserville Elementary School and crosswalks at Geyserville Avenue and the SR 128 "T" intersection. Along the portion of SR 128 east of town, pedestrian access includes a narrow sidewalk on the south side and a curb-separated dirt path on the north side. East of Remmel Road, there are no sidewalks or curbs.

At Tubbs Lane in Calistoga, SR 128 becomes Foothill Boulevard. Pedestrian access from Tubbs Lane to the SR 29 junction consists mainly of paved shoulders with short sections of sidewalks. Sidewalks and curb sections are located from Mitzi Drive to Petrified Forest Road and Elm Street to Lincoln Avenue. Crosswalks are located at Petrified Forest Road and Lincoln Avenue. The speed limit in this area is 40 miles per hour.

Segment D

CHARACTERISTICS

Section D begins at the intersection of St. Helena Highway (SR 29) and Rutherford Road (SR 128). Rutherford Road veers north and becomes Conn Creek Road. It crosses the Napa Valley floor, intersects with the Silverado Trail, turns south on Silverado Trail for about one-tenth of a mile, then turns east and becomes Sage Canyon Road as it winds through hills that line the eastern edge of the Napa Valley. It passes Lake Hennessey, part of the municipal drinking water supply for the city of Napa. The terrain in this segment is mostly hilly, arid open space with areas of vineyards, other agriculture and grazing. Hillside soil stability is a major issue in this segment, and there are sometimes winter rockslides.

Parks and other popular destinations adjacent to Segment D:

- Napa County Regional Park District - Lake Hennessey City Recreation Area
- Las Posadas State Forest
- Napa Valley wineries

PUBLIC TRANSPORTATION

The VINE, Napa County's fixed-route bus system, serves SR 128 where it shares its alignment with SR 29, in Segments C and D. There are no other public transportation lines along Segments D and E.

BICYCLE FACILITIES

There are no dedicated bicycle facilities along this segment. Only the short Silverado Trail part of SR 128 has paved shoulders. The remaining highway has no paved shoulders. Segment D is labeled "low to moderate traffic with little or no shoulder" on the Napa County bicycle map. This road, especially east of the Silverado Trail, is used in many of the County cycling events. Cyclists access the Pope Valley using SR 128 and Chiles-Pope Valley Road, avoiding the steep climb up Deer Park Road through the community of Angwin.



Figure 9 - Typical shoulder east of Silverado Trail

Photo: Google Street View

PEDESTRIAN FACILITIES

Outside Rutherford, there are no paved shoulders, or sidewalks. There are small sections of unpaved shoulders between SR 29 and Silverado Trail. East of Silverado Trail, except for turnouts and private driveways, there are no shoulders.

At Rutherford, SR 128 diverges east from SR 29 and is called Rutherford Road. There are continuous sidewalks on the north side of Rutherford Road east from SR 29 for about 200 feet and discontinuous sections on the south side to Grape Lane. The SR-29 and Rutherford Road intersection does not have a crosswalk. East of Rutherford there are no sidewalks or paved shoulders. There are wide unpaved shoulders on one or both sides of the highway. The remainder of the highway has no pedestrian facilities, and, except for turnouts, no paved or unpaved shoulders.

FREIGHT

Over 28 percent of the vehicles on this segment are trucks. Because of the many wineries in the area, the truck percentages are higher in the part of the segment that spans the valley between SR 29 and the Silverado Trail. Since Segment D east of Silverado Trail is contiguous with Segment E, it is safe to assume that truck percentages are similar: around 9 percent. These segments are the most direct link between Napa, northern Sonoma, and the Central Valley farming areas. Here SR 128 is a California Legal Advisory Route, a truck route classification that limits overall length to a maximum of 75 feet.

Segment E

CHARACTERISTICS

At Berryessa-Knoxville Road SR 128 becomes Capell Valley Road. It continues through the hills through open space, grazing, and agricultural areas to the Napa/Solano County line, and traverses Solano County for three-quarters of a mile, terminating at the Solano/Yolo County line. Knoxville Road provides access to popular Lake Berryessa recreational sites. This segment travels through sparsely populated, hilly, and dry terrain, which is chiefly open space or cattle grazing land. Hillside soil stability is a major issue in this segment, and there are sometimes rockslides in as well, mostly during winter storms.

Parks and other popular destinations adjacent to Segment E:

- Putah Creek State Wildlife Area
- Lake Berryessa

PUBLIC TRANSPORTATION

There is no public transit in this segment.

BICYCLE FACILITIES

Similar to segment D, there are no dedicated bicycle facilities in this segment and narrow paved shoulders (0 to 2 feet). Due to frequent minor rockslides, cyclists may encounter rocks and soil on the roadway.

PEDESTRIAN FACILITIES

There are no pedestrian facilities in this segment of SR 128.

FREIGHT

Trucks account for approximately nine percent of the vehicular traffic in segment E. This segment is the most direct link between Napa, northern Sonoma, and Central Valley farming areas. This segment is a California Legal Advisory Route.

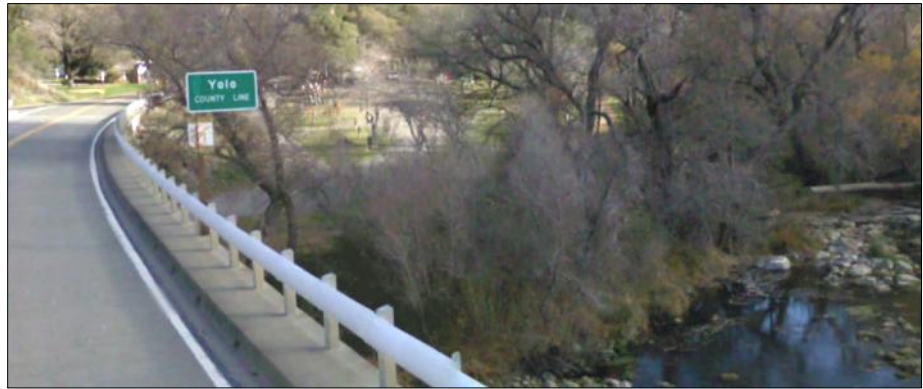


Figure 10 - Solano/Yolo County line at Putah Creek

Photo: Robert Bregoff



Historic Putah Creek Bridge

In the Early 1900s, Napa County had more stone bridges than any other county in the United States. An engineering marvel in its day, called the “Queen of the Stone Bridges,” the 1896 Putah Creek Bridge was the longest stone bridge west of the Rocky Mountains.

The historic bridge and the town of Monticello were both flooded in 1957 when the Monticello Dam blocked Putah Creek, creating Lake Berryessa, and Highway 128 was re-routed to the south. The historic three-arch stone spandrel bridge, re-discovered in 2012 by scuba divers using GPS, is remarkably intact, resting more than 120 feet beneath the surface of Lake Berryessa.



Figure 11 - Old Putah Creek Bridge

Source: Wikimedia Commons

ENVIRONMENTAL CONSTRAINTS

This section lists the environmental constraints in the SR 128 corridor that may influence the planning and design of future projects. The information is provided to complete the description of the corridor and to point out high-level environmental information available today. For example, the presence of protected species and habitats would require monitoring of any project in the corridor.

The maps on the following two pages depict environmental setting and issues along and adjacent to the SR 128 corridor. The information provided is not comprehensive and detailed studies will be required for any project to be implemented.

Environmental issues:

- Topographical challenges, vegetation, and hillside stability
- Nine historic bridges that cross the Russian and Napa Rivers and various smaller tributaries
- Two 4(f) resources
- Habitat for species of concern⁵
- Rivers and creeks with threatened species and fish migration
- The [Napa County General Plan](#) protects agriculture, watershed and open space lands by maintaining minimum parcel size requirements, and designating agriculture as a primary land use.
- [Sonoma County General Plan Agricultural Resources Element](#) limits urban development in agricultural areas
- [Priority Conservation Areas](#) (PCAs)⁶
- Visual aesthetics, scenic vistas, historic trees



Figure 12 – Oblique aerial view of the Alexander Valley and the Russian River

Photo: Google Earth

⁵ A species of concern is determined to be threatened (or is likely to become endangered in the near future) when it is determined to be negatively impacted by any or all of the following factors: 1) current or imminent destruction or degradation of its habitat or range; 2) over-extraction for any purpose or by any means; 3) population-level impacts of disease or predation; 4) existing regulatory mechanisms that are inadequate to protect the species; or 5) other natural or anthropogenic factors significantly impeding the species' survival.

⁶ PCAs represent regionally significant near term conservation priorities. PCAs can include key wildlife habitats, scenic resources, trails and recreational areas.

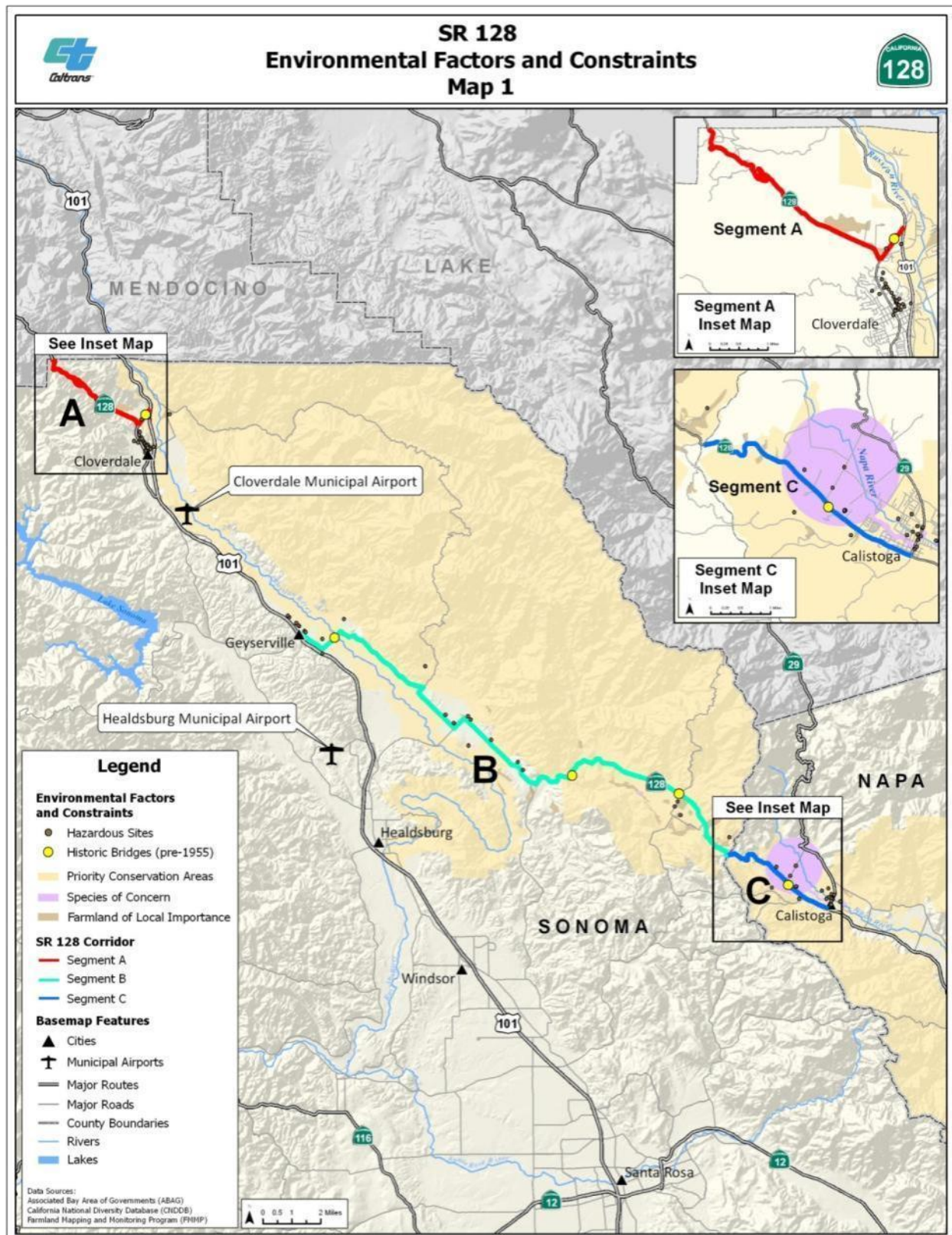


Figure 13 – Environmental Factors and Constraints

Source: Caltrans GIS

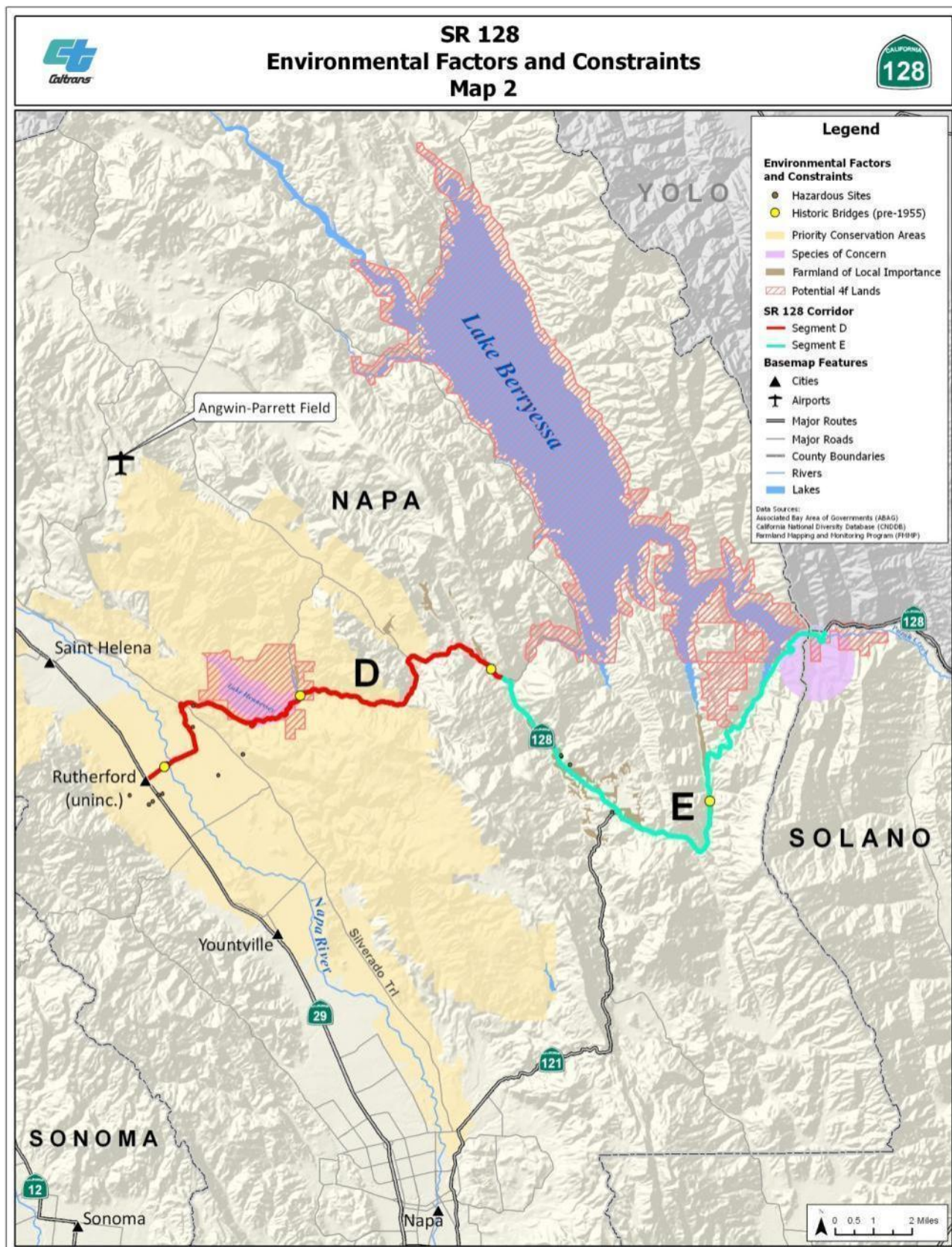


Figure 15 – Environmental Factors and Constraints

Source: Caltrans GIS

4 - CORRIDOR PERFORMANCE

This chapter provides SR 128 traffic and collision data. Traffic counts are reported for motor vehicles. Bicycle and pedestrian counts are not available. Collision data include all modes, but are not reported separately.

This table uses 2009 Traffic data and 2035 traffic projections. The pink row (Seg. C) shows that this segment has significantly higher traffic counts.

Table 4 - Traffic Counts by Segment and Daily Peak Hour

TRAFFIC DATA -2009								FUTURE TRAFFIC DATA -2035						V/C RATIO*		2035 V/C RATIO	
Seg.	AM Peak Hour		PM Peak Hour		AADT		% Trucks	AM Peak Hour		PM Peak Hour		AADT					
	EB	WB	EB	WB	EB	WB		EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
A	116	67	103	117	1146	1152	8.53%	131	76	117	332	1297	1304	0.06	0.07	0.07	0.07
B	142	233	200	210	1939	2645	5.86%	480	300	226	238	2190	2999	0.11	0.13	0.13	0.15
C	330	200	350	370	5100	4900	7.70%	160	264	510	540	7400	7100	0.67	0.65	0.86	0.83
D	40	50	60	70	760	930	28.2%	80	100	130	130	1500	1800	0.28	0.32	0.38	0.43
E	70	50	80	70	960	870	9.00%	100	70	120	100	1400	1300	0.24	0.15	0.28	0.18

*VC=Volume to Capacity⁷

Traffic Information

Average Annual Daily Traffic (AADT) is defined as the total number of vehicles passing a given location over a one-year period divided by 365 days. This number is then compared to the vehicle capacity of the roadway to arrive at volume-to-capacity (V/C) ratios. Caltrans uses 2000 Vehicles per lane/hour for our calculations for most conventional highways unless indicated otherwise. As shown in Table 4, SR 128 capacity is sufficient to accommodate traffic through the 2035 planning horizon⁸.

In Segment A the projected V/C ratio for 2035 indicates that no congestion is anticipated in the long term. Communities along that segment and in adjacent Mendocino County are not expected to see much growth.

Segment B, D, and E run through agricultural, mostly wine growing area, which are protected from development. As in Segment A, there will be no need to add capacity to these segments within the 2035 planning horizon.

Only Segment C has higher traffic volumes and will see moderate to heavy congestion, in particular the section between Tubbs Lane and the Petrified Forest Road, which is used by commuters between Lake and Sonoma Counties (see Table 6).

⁷ V/C ratio is a comparison of the amount of traffic on a road with the capacity of that road. A v/c ratio is expressed as a decimal, with values less than 1.00 indicating that volume is less than capacity and values more than 1.00 indicating that volume exceeds capacity. As values approach 1.00, congestion becomes more severe, with values more than 1.00 indicating severe congestion.

⁸ 2035 data is taken from projected population growth figures for the subject county from the Association of Bay Area Governments (ABAG).

Collision Data

Table 5 shows both the number and type of collisions that occur in each segment. The collision rate calculates the number of incidents per million vehicle miles travelled compared to the statewide average of a similar type of highway facility.

This data shows that the collision rate in Segments A, B, and E are below the statewide average, and Segments C and D are above. In Segments C and D, the route is co-aligned with State highways and county roads that have higher traffic volumes, speeds, and two busy “T” intersections.

Table 5 – Collision Rates/Average per MVM⁹

Route 128					Statewide ¹⁰		
Seg.	Total	Fatal	Fatality+ Injury	Averaged Total	Fatal	Fatality + Injury	Averaged Total
A	9	0.0	.28	.83	.045	.91	1.80
B	78	0.016	.65	1.23	.034	.65	1.41
C	57	0.033	.92	1.86	.028	.60	1.38
D	52	0.0	.95	1.89	.039	.75	1.59
E	38	0.028	.75	1.05	.041	.82	1.67

Boldface = Greater than statewide average Source: Caltrans TASAS Database

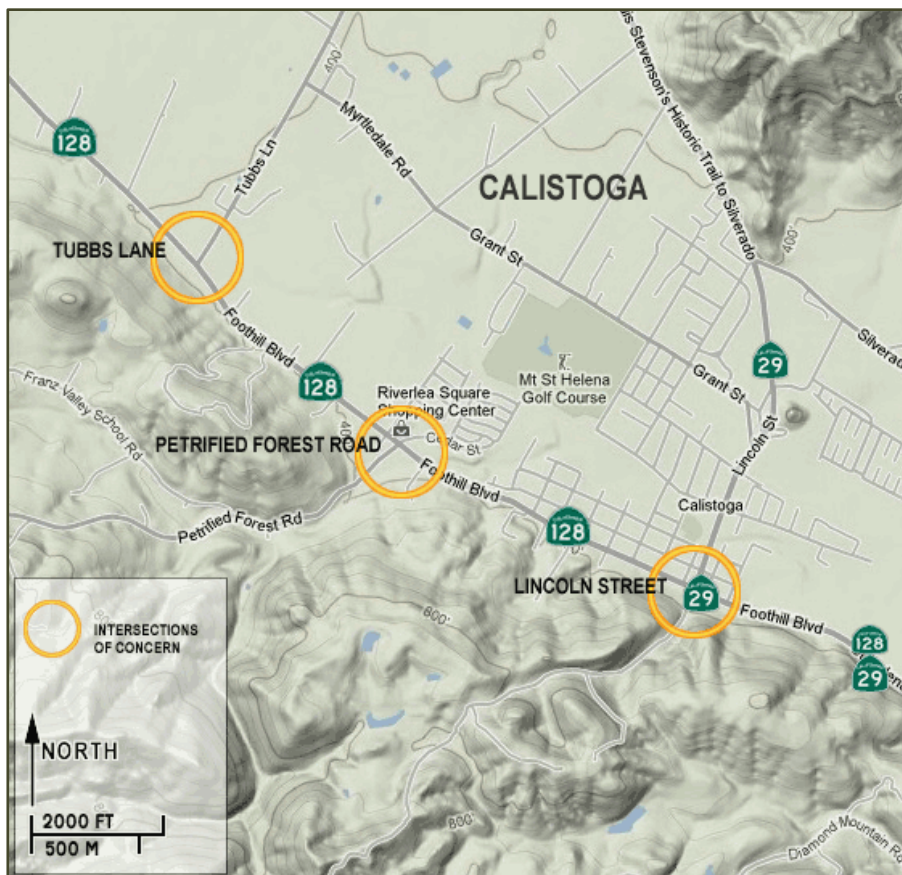


Figure 16 – Intersections of Concern

Source: Google Maps

⁹ Million Vehicle Miles

¹⁰ These figures reflect statewide average for comparable facilities

5 - KEY CORRIDOR ISSUES

This chapter lists key safety and performance issues, which inform the development of the SR 128 corridor concept. Issues #1 - 3 refer to the whole corridor, #4 - 7 address issues specific to a particular location or segment. Issue #7, the operational problems at the intersection of SR 128 and Petrified Forest Road, is described in more detail as it illustrates the interregional use of SR 128.

1. SR 128 is a high-maintenance highway with storm-related problems requiring frequent landslide clearing and tree removal.
2. Many sections of SR 128 lack paved (or unpaved) shoulders for use by pedestrians and cyclists. Shoulder areas also have safety and operational benefits as they provide a safe area for maintenance workers and lessen the impact of maintenance work on traffic flow.
3. As part of the Interregional Road System (IRRS), SR 128 is recognized as an important corridor for interregional travel and commerce.
4. Segment A is the primary connection for recreational travel and goods movement between US- 101 and Highway 1 along the Pacific Coast. Steep, curvilinear terrain with sections of grades greater than six percent are a challenge to large vehicles such as trucks and buses.
5. Segment B provides access to the Dry Creek Rancheria Band of Pomo Indians and their River Rock Casino via Bureau of Indian Affairs (BIA) Route 93. The 2007 *Traffic Impact Study for Dry Creek Rancheria Economic Development Master Plan* has identified the need to install a traffic signal and left turn lane at the intersection, because it anticipates Level of Service (LOS) F at the intersection when Casino is built-out. Caltrans, Tribal planners, and Sonoma County are studying options to improve the intersection and identify funding for improvements. Federal funding for Indian Reservation Roads (IRR) is available to Tribal governments for maintenance and improvements of both reservation and off-reservation highways that traverse or provide access to reservations and Rancherias. A portion of SR 128 is in the IRR inventory as it provides access to the Rancheria.
6. Segments B and C provide the connection between US 101 and the Napa Valley, between the important wine-growing regions of Napa and Sonoma Counties, and access to Mendocino County for regional and local truck traffic.
7. Segment C has heavy commute traffic at the SR 128/Petrified Forest Road intersection in Calistoga (see detailed discussion below).
8. In Segment D, the Intersection of SR 29/128 and Rutherford Road/SR 128 is targeted for traffic and pedestrian safety improvements. Napa County studied and rejected a roundabout intersection at this location because of the proximity of a rail crossing. Other traffic control alternatives are being studied, but no decision has been made as of the time this document is being published.

Foothill Boulevard (SR 128)/Petrified Forest Road Intersection

The one-mile section of SR 128 between Tubbs Lane and Petrified Forest Road has the highest traffic volumes on the SR 128 corridor.

A 2006 study¹² by the Wine Country Interregional Partnership (WCIRP), sponsored by the Mendocino Council of Governments (MCOG), investigated the characteristics of interregional trips in four North Bay Counties. *Origin and Destination Study: Mendocino, Lake, Napa and Sonoma Counties* confirms that the source of the traffic at this intersection is inter-county commuting.

Workers from Napa and Sonoma counties seek affordable housing in Lake and Solano Counties. Napa County has a profusion of service industry and agricultural jobs, but also some of the highest housing prices in the Bay Area, comparable to San Francisco. Strict agricultural preservation laws prevent nearly all but infill construction within existing towns or urbanized areas.

Table 6 presents some of the study findings. It shows commute patterns at the Petrified Forest Road intersection with SR 128. A large percentage (29% westbound in the AM Peak and 36% eastbound in the PM peak) of commuters are from Lake County. Improvements at this intersection are planned.

Table 6 -

Commute Patterns: SR 128 and Petrified Forest Road

VEHICLE ORIGIN BY COUNTY						
Morning Peak Commute Hours:						
VEHICLE ORIGIN COUNTY		East Bound AM		West Bound AM		
Lake		6.19%		29.33%		
Napa		18.42%		33.81%		
Sonoma		53.81%		14.90%		
Evening Peak Commute Hours:						
VEHICLE ORIGIN COUNTY		East Bound PM		West Bound PM		
Lake		36.42%		6.42%		
Napa		27.75%		23.74%		
Sonoma		15.86%		50.39%		
Trip Purpose						
Work/ Commute	Personal Errands	Recreation/ Touring	School	Shopping	Other	
37%	21%	10%	3%	21%	8%	
Trip Frequency						
Daily (5-7 times per week)		3-4 times per week		1-2 times per week		Monthly
40%		15%		19%		11%
Vehicle Type						
Car/pick- up/SUV	Motorcycle	RV		Commercial Truck	Other	
89%	2%	1%		4%	4%	
Vehicle Occupancy						
One		Two		Three or more		
56%		34%		10%		

Data: WCIRP¹¹ Origin/Destination Study, 2006

¹¹ [Wine Country Interregional Partnership – Origin/Destination Study](#) for Mendocino, Lake, Napa, and Sonoma Counties
Mendocino Council of Governments, December 29, 2006

¹² <http://www.mendocinocog.org/pdf/Wine%20Country%20IRP/Wine%20IRP%200&D%20Final%20Report-Dec2006.pdf>

6 - CORRIDOR CONCEPT

This corridor concept conveys Caltrans vision for the route with respect to corridor capacity and operations for 20 to 25-year planning horizon. The concept is developed under consideration of factors that create interregional, regional, and local multi-modal travel demand, including commuting, freight movement, recreational needs, and nearby land uses.

The route concept is derived from:

- Data review and analysis
- Local and regional planning documents
- Input from various internal and external stakeholders
- [Deputy Directive \(DD\) 64-R1](#) (Complete Streets) and other Caltrans policies and directives
- Bay Area Regional Transportation Plan and Sustainable Communities Strategy
- Review of previous system planning documents by Caltrans and others

Table 7—Corridor Concept by Segment

SEG	DESCRIPTION	County	PM	PM	FACILITY-EXISTING	25-YR CONCEPT
A	MEN/SON county line to US 101	SON	0.0	4.8	2C	2C
B	US 101 to SON/NAP county line	SON	4.8	24.76	2C	2C
C	SON/NAP county line to SR 29	NAP	0.0	4.56	2C	2C
D	SR 29 to Knoxville Road	NAP	4.56	19.09	2C	2C
E	Knoxville Road to SOL/YOL county line	NAP/SOL	19.09	34.27	2C	2C

C = Conventional Highway

Concept Rationale

Projected growth in the corridor indicates that the current facility can easily provide throughput for vehicular traffic. Thus, the Concept Rationale calls for preserving the current number of vehicle lanes. Operational issues at the SR 128/Petrified Forest Road and SR 128/ Conn Creek Road intersections, however, need to be addressed. In addition, pedestrian facilities need to be provided where SR 128 serves as a Main Street or wherever sensitive trip generators or destinations are present. Caltrans will continue to work in partnership with the Dry Creek Rancheria Band of Pomo Indians Tribal government and their consultants to address improvements at the intersection of SR 128 and BIA 93.

Most of SR 128 traverses agricultural land, much of which is protected by agricultural trusts and preserves, limiting outward expansion and lateral growth of urbanized areas. Caltrans *Smart Mobility Framework* (SMF) suggests applying principles of location efficiency to utilize residential and commercial infill opportunities, which facilitate walkability and other forms of active, as well as public, transportation. While opportunities for infill are limited in the towns of this rural corridor, another emphasis of the SMF is the need to maintain the individual character and history of communities.

“Rural towns provide a mix of housing, services and public institutions in compact form that serve surrounding rural areas. They vary in size from crossroads with single clusters of commercial uses to towns offering a full range of retail and service businesses. Towns may also be the focus of tourist and recreational activity or gateways to recreation areas in protected lands.”

The Caltrans *Highway Design Manual* states the following:

“The location of the highway should be such that the new construction will preserve the natural environment and will lead to and unfold scenic positions.”

These considerations are reflected in the planning documents of local planning partner agencies. For example, the *Sonoma County General Plan 2020*¹³ acknowledges that future circulation planning will be based on these principles:

- Highway expansion leads to greater traffic volumes, and, in the end, more congestion.
- County and City land use policies favoring city-centered growth suggest that a firm commitment to a convenient transit system will be more effective in reducing congestion over time.
- Road capacity improvements that would be needed to provide high mobility will likely cause disruption of some communities, businesses and neighborhoods.
- Lack of convenient public transit and safe bicycle and pedestrian facilities is a major barrier to reducing dependence on automobiles.
- An automobile dependent transportation network is unsustainable and has a significant impact on public health.

Recreational activities affect travel patterns in this region. Lake Sonoma is a major visitor destination and affects Dry Creek and Dutcher Creek Roads as well as Highway 101. River Rock Casino in Alexander Valley operates 24 hours a day, 365 days a year, and attracts visitors from throughout the Bay Area and beyond. There is also increased tourism in Sonoma County.

The city of Cloverdale is a key location for SMART rail service. Development of supporting land uses around the station is an important policy issue as Cloverdale reviews and updates its General Plan. SMART has identified passenger rail station and maintenance facility sites in the City of Cloverdale.

Transportation improvements cited in the General Plan include Class II bicycle lanes on the entirety of the Sonoma County segments of SR 128, as well as a Class I facility roughly paralleling US 101 from Cloverdale south to Marin County utilizing the SMART right-of-way.

The Dry Creek Rancheria Band of Pomo Indians is negotiating with Sonoma County and local governments to fund improvements along SR 128, including sidewalk improvements, a pedestrian bridge to be used by many schoolchildren, and changes to access the River Rock Casino property to better accommodate buses and emergency vehicles.¹⁴

Principles summarized in *Napa's Transportation Future*¹⁵ (2009) are similar to those of Sonoma County:

- Reduce/restrain growth of automobile vehicle miles traveled (VMT)
- Distribute the travel load from peak times to non-peak times
- Improve the quality and safety of street and road infrastructure
- Shift travel from Single-Occupancy Vehicles to other modes
- Reduce overall energy use and greenhouse gas (GHG) emissions
- Retain rural, agricultural quality of roadways outside of urbanized areas

Both Sonoma and Napa Counties are engaged in planning and constructing expansion of their bicycle/pedestrian facilities. Improvements such as these attract cycle tourism and cycling events, both of which enhance local commerce without adding traffic to the roadways.

Where Route 128 is a Main Street, Caltrans seeks to contribute to achieving livable communities goals. Community enhancements can include:

- The development of traffic calming to reduce traffic speed and noise
- Development of context-sensitive improvements
- Improving bicycle and pedestrian facilities to encourage active transportation
- Maximize the opportunities for Complete Streets
- Reduce greenhouse gas (GHG) output
- Smart Mobility Framework principles

¹³ <http://www.sonoma-county.org/prmd/gp2020/index.html>

¹⁴ <http://www.sonoma-county.org/prmd/gp2020/cte.pdf>

¹⁵ <http://www.countyofnapa.org/GeneralPlan/>

Strategies and Projects to Achieve Concept

The following strategies provide direction for the development of projects and priorities for the corridor. All projects currently planned and implemented on SR 128, as listed in Table 8, are maintaining and enhancing this two-lane conventional highway.

- Intersection improvement options at Foothill Blvd. (SR 128) and Tubbs Lane, Foothill and Petrified Forest Road, including the feasibility roundabouts at key locations
- Intersection improvements at Conn Creek Road (SR 128) & Silverado Trail, Sage Canyon Road (SR 128).
- Intersection improvements at SR 29/128 and Rutherford Road.
- Assess need for sidewalks and marked crosswalks adjacent and across SR 128 at curbed intersections; curb ramp upgrades, pedestrian warning signs, and controlled crosswalks where SR 128 serves as a Main Street and near major or sensitive trip generators and destinations such as schools and community facilities, if there are no controlled crosswalks nearby.
- Assess need for slide-prevention measures where hillsides have shown to be unstable with the goal of reducing emergency road maintenance needs due to seasonal earth and rockslides.
- Replace narrow and/or unstable bridges with bridges that meet current Caltrans standards, while recognizing the importance of preservation and renovation of historic bridges.
- Work with local transit agencies on strategies to increase throughput without adding lanes, where necessary.
- Support and facilitate implementation of bicycle, pedestrian, and transit facilities.
- Increase active transportation facilities, increase safety on existing facilities.
- Continue to work with the Dry Creek Rancheria Band of Pomo Indians to determine an appropriate improvement for the SR 128/BIA 93 Intersection.
- Recognize key importance of agriculture goods movement.

Table 8 – Planned and Programmed Projects

	COUNTY	PROJECT DESCRIPTION	LOCATION	PHASE	PROJECT EA
SHOPP	NAP	CONSTRUCT ROADWAY RETAINING SYSTEMS, REPLACE BRIDGE RAILS	NEAR WINTERS, 1.8 MILES EAST OF WRAGG CANYON RD	ENVIRONMENTAL	2G9500
	NAP	REPLACE BRIDGE/OVERLAY	NEAR RUTHERFORD, AT CONN CREEK BRIDGE NO. 21-0021	ENVIRONMENTAL	1G4300
	NAP	SLOPE INDICATORS	CAPPELL CREEK BRIDGE	ENVIRONMENTAL	3G7600
	SON	MITIGATION PLANTING	NEAR KELLOGG AT 0.1 MILES WEST OF REDWOOD CREEK BRIDGE	ENVIRONMENTAL	4A8811
	NAP	CONSTRUCT CAST-IN-DRILLED-HOLE SOLDIER PILE WALL.	NEAR RUTHERFORD, AT 1.1 MILES OF KNOXVILLE ROAD.	ENVIRONMENTAL	2G9400
	SON	CONSTRUCT LAUNCHED SOIL NAIL WALL	NEAR CLOVERDALE, AT 2.4 MILES WEST OF NORTH CLOVERDALE BOULEVARD.	ENVIRONMENTAL	1SS220
	SON	CONSTRUCT CAST-IN-DRILLED-HOLE PILE WALL AND REPLACE CULVERT	NEAR CLOVERDALE, AT 1.8 MILES WEST OF THE MENDOCINO COUNTY LINE.	DESIGN	3G1200
	NAP	REPLACE BRIDGE	CAPELL CREEK BRIDGE (RTP # 210078)	PID	
	NAP	INSTALL RUMBLE STRIPS	AT VARIOUS LOCATIONS	PID	
RTP 2035	NAP	INTERSECTION IMPROVEMENT PROJECT	PETRIFIED FOREST ROAD/SR 128 (RTP # 230518)	PLANNED	

Table 9 – Commonly Used Acronyms

AADT- Average Annual Daily Traffic
ABAG -Association of Bay Area Governments
ADT- Average Daily Traffic
BAAQMD - Bay Area Air Quality Management District
BART- Bay Area Rapid Transit District
BCDC - San Francisco Bay Conservation and Development Commission
CAA - Federal Clean Air Act
CARB - California Air Resources Board
CCAA - California Clean Air Act
CEQA - California Environmental Quality Act
CHP - California Highway Patrol
CO - Carbon Monoxide
DEIR - Draft Environmental Impact Report
DEIS - Draft Environmental Impact Statement
EB - Eastbound
EIR - Environmental Impact Report
EIS - Environmental Impact Statement
EPA U.S. - Environmental Protection Agency
FHWA - Federal Highway Administration
FTA - Federal Transit Administration
HCM - Highway Capacity Manual
HOV - High Occupancy Vehicle
I - Interstate
IRR - Indian Reservation Roads
LRT - Light Rail Transit
MIS - Major Investment Study
MOA - Memorandum of Agreement
MOU - Memorandum of Understanding
MPO - Metropolitan Planning Organization
MTC - Metropolitan Transportation Commission
NB - Northbound
NCI - Non-capacity-increasing
NEPA - National Environmental Policy Act
NPS - National Park Service
OPS - Operations
PM - Post Mile
PPM - Parts per Million
SB - Southbound
SHS - State Highway System
SMART - [Sonoma-Marín Area Rail Transit](#)
SR - State Route
TCR - Transportation Concept Report
TEA-21 - Transportation Equity Act for the 21st Century
TMP - Traffic Management Plan
VMT - Vehicle Miles Traveled
WB - Westbound
V/C - Volume to Capacity

Acronym Guide: www.dot.ca.gov/hq/LocalPrograms/training/Acronyms.doc

7 - APPENDIX A

Federal, State, and Regional Plans, Programs, and Deputy Directives

CTRL+CLICK on underlined titles to open program websites. Hover over titles to view URLs.

FEDERAL

[Moving Ahead for Progress in the 21st Century Act \(MAP-21\)](#) P.L. 112-141,

MAP-21 was signed into law in July 2012. This act will provide funding for surface transportation programs for fiscal years (FY) 2013 and 2014. MAP-21 is the first long-term highway authorization enacted since 2005. MAP-21 creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, improving and/or maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

[Federal Transportation Improvement Program \(FTIP\)](#)

All federally funded projects, and regionally significant projects (regardless of funding), must be listed in the FTIP per federal law. A project is not eligible to be programmed in the FTIP until it is programmed in the *State Transportation Improvement Program* (STIP) or in the *State Highway Operations and Protection Program* (SHOPP). Other types of funding (Federal Demonstration, Congestion Mitigation and Air Quality (CMAQ), Transportation Enhancement Activities (TEA), and Surface Transportation Program (STP) must be officially approved before the projects can be included in the FTIP.

[The American Recovery and Reinvestment Act of 2009 \(ARRA\)](#)

The American Recovery and Reinvestment Act of 2009, also called Recovery Act intended to help states and the nation restart their economies and stimulate employment. Nationally, the bill provided more than \$48 billion for transportation. Formula programs in the Recovery Act apportioned to California approximately \$2.57 billion for highways, local streets and roads, freight and passenger rail, and port infrastructure projects, and \$1.07 billion for transit projects. In addition, California is eligible to apply for funding under other discretionary programs that set aside:

- \$8 billion for high speed and intercity rail
- \$1.5 billion for significant surface transportation projects
- \$1.3 billion for aviation
- \$2.2 billion for AMTRAK, new starts, transit, ferries and other programs

[Indian Reservation Roads](#)

The Indian Reservation Roads (IRR) Program addresses transportation needs of tribes by providing funds for planning, designing, construction, and maintenance activities for all public roads. The program is jointly administered by the Federal Highway Administration's Federal Lands Highway Office and the BIA, Division of Transportation, in accordance with an interagency agreement.

STATE

[California Transportation Plan \(CTP\)](#)

The California Transportation Plan 2035 focuses on plans, policies, and processes that address the provisions of MAP 21. It is a statewide, long-range transportation policy plan that provides for the movement of people, goods, services, and information. The CTP offers a blueprint to guide future transportation decisions and investments that will ensure California's ability to compete globally, provide safe and effective mobility for all persons, better link transportation and land use decisions, improve environmental quality, and reduce petroleum energy consumption.

California Interregional Blueprint (CIB)

Caltrans is enhancing the State's transportation planning process to respond to future challenges. Similar to requirements for regional transportation plans under Senate Bill (SB) 375 (Steinberg 2008), SB 391 (Liu 2009) requires the State's long-range transportation plan to meet California's climate change goals under Assembly Bill (AB) 32.

In response to these statutes, Caltrans is preparing a state-level transportation blueprint to articulate the State's vision for an integrated, multi-modal interregional transportation system that complements regional transportation plans and land use visions. The CIB will integrate the State's long-range modal plans and Caltrans-sponsored programs with the latest technology and tools to enhance our ability to plan for and manage the transportation system.

An Interim Report was released in December 2012. It sets the course for the next California Transportation Plan, to be completed in 2015.

Regional Transportation Improvement Program (RTIP)

The Regional Transportation Improvement Program is a sub-element of the State Transportation Improvement Program (STIP). The Metropolitan Transportation Commission is responsible for developing regional project priorities for the RTIP for the nine counties of the Bay Area. The biennial RTIP is then submitted to the California Transportation Commission for inclusion in the STIP.

Interregional Transportation Improvement Program (ITIP)

The Interregional Transportation Improvement Program (ITIP) is a State-funding program for the Interregional Improvement Program (IIP) and is a sub-element of the State Transportation Improvement Program. The IIP is a state funding category created in SB 45 for intercity rail, interregional road or rail expansion projects outside urban areas, or projects of statewide significance, which include projects to improve State highways, the intercity passenger rail system, and the interregional movement of people, vehicles, and goods. Caltrans nominates and the California Transportation Commission approves a listing of interregional highway and rail projects for 25 percent of the funds to be programmed in the STIP (the other 75% are Regional Improvement Program funds). Only projects planned on State highways are to be included in this program.

District System Management Plan (DSMP)

The District System Management Plan (DSMP) is a long-range (20 year) strategic and policy planning document that presents the long range goals, policies and programs the district intends to follow in maintaining, managing, and developing the transportation system. It serves as a resource for informing federal, state, regional and local agencies, and the public and private sector of the plans the district intends to follow in its partnership role with local and regional agencies.

State Highway Operation and Protection Program (SHOPP)

Caltrans prepares the SHOPP for the expenditure of transportation funds for major capital improvements necessary to preserve and protect the State Highway System. The SHOPP is a four-year funding program. SHOPP projects include capital improvements for maintenance, safety, and rehabilitation of State highways and bridges. The 10-Year SHOPP anticipates long-term projected expansion and maintenance needs.

10-Year SHOPP

The 10-year SHOPP is a State plan for the rehabilitation and reconstruction, or both, of state highways and bridges. The purpose of the plan is to identify needs for the upcoming ten years. The plan is updated every two years. It includes specific milestones, quantifiable accomplishments and strategies to control cost and improve the efficiency of the program. 10-year SHOPP differs from SHOPP, as it has no funding constraints assigned; it is a needs inventory.

State Transportation Improvement Program (STIP)

The STIP is a multi-year capital improvement program of transportation projects on and off the State Highway System, funded with revenues from the Transportation Investment Fund and other funding sources. Caltrans and the regional planning agencies prepare transportation improvement plans for submittal. Local agencies work through their Regional Transportation Planning Agency (RTPA), County Transportation Commission, or Metropolitan Planning Organization (MPO), as appropriate, to nominate projects for inclusion in the STIP.

Senate Bill 45 (SB 45)

SB 45 establishes guidelines for the California Transportation Commission to administer the allocation of funds appropriated from the Public Transportation Account for capital transportation projects designed to improve transportation facilities.

California Strategic Growth Plan

The Governor and Legislature have initiated the first phase of a comprehensive Strategic Growth Plan to address California's critical infrastructure needs over the next 20 years. California faces over \$500 billion in infrastructure needs to meet the demands of a population expected to increase by 23 percent over the next two decades. In November 2006, the voters approved the first installment of that 20-year vision to rebuild California by authorizing a series of general obligation bonds totaling \$42.7 billion.

Regional Blueprint Planning Program

The Caltrans Regional Blueprints program supported collaborative regional planning efforts across California through grants, support services and interagency coordination.

Regional Blueprints are collaborative planning processes that engage residents of a region in articulating a vision for the long term future of their region. The regional vision is developed from residents' values and priorities, and informed by advanced GIS modeling and visualization tools that demonstrate the impacts of growth and planning decisions. The process leads to the development of alternative growth scenarios for the region, and through a public process a preferred growth scenario is selected that can then guide regional and local land use and transportation decisions for a future that is sustainable, while meeting residents' needs and providing a high quality of life for all.

Smart Mobility Framework

Caltrans released *Smart Mobility 2010: a Call to Action for the New Decade* in February 2010. SMF was prepared in partnership with US Environmental Protection Agency, the Governor's Office of Planning and Research, and the California Department of Housing and Community Development to address both long-range challenges and short-term pragmatic actions to implement multi-modal and sustainable transportation strategies in California.

Smart Mobility 2010 provides new tools and techniques to improve planning. It links land use "place types," considers growth scenarios and how growth will best gain the benefits of smart mobility

The SMF emphasizes travel choices, healthy, livable communities, reliable travel times for people and freight, and safety for all users. This vision supports the goals of social equity, climate change intervention, and energy security as well as a robust and sustainable economy.

Goods Movement Action Plan (GMAP)

The Goods Movement Action Plan (GMAP) was issued by the California Business, Transportation and Housing Agency (Agency) and the California Environmental Protection Agency (Cal EPA) in two phases in 2005 and 2007. It was a major milestone in statewide policy and planning for freight transportation, trade corridors, and related air quality issues. The GMAP helped guide project selection for the allocation of funds under the \$2 billion Trade Corridors Improvement Fund (TCIF) program, authorized by the voter-approved Highway Safety, Traffic Reduction, Air Quality and Port Security Bond Act of 2006 (Proposition 1B).

Statewide Strategy: The State of California has a framework for action for goods movement decision making in the Goods Movement Action Plan. The plan provides analysis, strategies, and recommendations to address California's current and projected goods movement needs for capacity expansion, improved

efficiency, enhanced security, job creation, and the mitigation of public health, environmental, and community impacts. The GMAP was the result of a transparent and an inclusive process that involved a diverse group of stakeholders. It was a key component of former Governor Arnold Schwarzenegger's Strategic Growth Plan, which has helped to inform allocation of Proposition 1B funding for the [Trade Corridors Improvement Fund](#) (TCIF) Program and the [Goods Movement Emission Reduction](#) Program.

[Caltrans Deputy Directive 64-R1](#) *Complete Streets - Integrating the Transportation System*

This Deputy Directive expresses Caltrans commitment to provide for the needs of all travelers including pedestrians, bicyclists and persons with disabilities in all programming, planning, maintenance, construction, operations, and project development activities and products.

[State Assembly Bill 32 \(AB 32\)](#) *Global Warming Solutions Act, September 2006*

This bill requires the State's greenhouse gas emissions to be reduced to 1990 levels by the year 2020. Caltrans' strategy to reduce global warming emissions has two elements. The first is to make transportation systems more efficient through operational improvements. The second is to integrate emission reduction measures into the planning, development, operations and maintenance of transportation elements.

[Senate Bill 375 \(SB-375\)](#) *Addressing Greenhouse Gas Emissions from the Transportation Sector*

SB 375 provides a means for achieving AB 32 goals from cars and light trucks. The transportation sector contributes over 40 percent of the GHGs throughout the state. Automobiles and light trucks alone contribute almost 30 percent. SB-375 requires the California Air Resources Board (ARB) to develop regional greenhouse gas (GHG) emission reduction targets for cars and light trucks for each of the 18 Metropolitan Planning Organizations (MPOs). Through their planning processes, each of the MPOs is required to develop plans to meet their regional GHG reduction target. This would be accomplished through either the financially constrained "sustainable communities strategy" as part of their regional transportation plan (RTP) or an unconstrained alternative planning strategy. SB-375 also provides streamlining of California Environmental Quality Act (CEQA) requirements for specific residential and mixed-use developments.

[Caltrans - Climate Action Plan](#)

Greenhouse gas (GHG) emissions and the related subject of global climate change are emerging as critical issues for the transportation community. Caltrans recognizes the significance of cleaner, more energy efficient transportation. On June 1, 2005 the State established climate change emissions reduction targets for California that lead to development of the Climate Action Program. This program highlights reducing congestion and improving efficiency of transportation systems through smart land use, operational improvements, and Intelligent Transportation Systems (objectives of the State's Strategic Growth Plan). The Climate Action Plan approach also includes institutionalizing energy efficiency and GHG emission reduction measures and technology into planning, project development, operations, and maintenance of transportation facilities, fleets, buildings, and equipment.

[Corridor Mobility Improvement Account \(CMIA\)](#)

[The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006](#), approved by the voters as Proposition 1B on November 7, 2006, includes a program of funding from \$4.5 billion to be deposited in the Corridor Mobility Improvement Account (CMIA). The funds in the CMIA are to be available to the California Transportation Commission, upon appropriation in the annual Budget Bill by the Legislature, for allocation for performance improvements on the state highway system or major access routes to the state highway system. The CMIA presents a unique opportunity for the State's transportation community to provide congestion relief, enhanced mobility, improved safety, and stronger connectivity to benefit traveling Californians.

[Corridor System Management Plans \(CSMP\)](#)

CSMPs were developed for corridors that received funding from the Corridor Mobility Improvement Account (CMIA). The CSMP incorporated detailed operational analysis into corridor planning through performance assessments, analysis and evaluation, leading to recommending system management strategies for a corridor.

Trade Corridors Improvement Fund (TCIF)

In November 2006, voters approved Proposition 1B, a roughly \$20 billion Transportation Bond. It established the Trade Corridors Improvement Fund that included a total of \$3.1 billion for goods movement-related programs, of which \$2 billion was set aside for infrastructure improvements statewide.

Freeway Performance Initiative (FPI)

The FPI is a joint effort between Caltrans and the Metropolitan Transportation Commission to improve the operations, safety and management of the Bay Area's freeway network by deploying system management strategies, completing the HOV lane system, addressing regional freight issues, and closing key freeway infrastructure gaps.

Complete Streets

Caltrans Deputy Directive 64 – R1 Complete Streets – Integrating the Transportation System provides for the needs of all users: bicyclists, pedestrian, transit users, truckers, and motorists. The intent is to plan a transportation facility that serves the needs of all users equally.

REGIONAL

2035 Regional Transportation Plan (RTP)

Transportation 2035 Plan for the San Francisco Bay Area - The Metropolitan Transportation Commission is responsible for adopting the RTP for the nine-county San Francisco Bay Area. The RTP defines a 25-year vision for the region's transportation network. The Plan is updated every four years. The 2013 update, titled Plan Bay Area is currently underway. Plan Bay Area is one of the region's most comprehensive planning efforts to date. This RTP update will be finalized in the spring of 2013. It will include Sustainable Communities Strategy, per SB-375 requirement. This law requires that the region reduce transportation related greenhouse gas emissions through joint planning efforts.

8 - APPENDIX B

CALTRANS DATA AVAILABLE ONLINE

■ CALTRANS Earth

The Division of Transportation System Information is providing a new generation of web-based data access for sharing and viewing tools through the Google Earth and API Web Page. The Caltrans Earth solution is a powerful, network-based 2D and 3D mapping system that makes vast amounts of data easily accessible to the public. Caltrans Earth utilizes a California-focused virtual world created by Caltrans. http://dot.ca.gov/hq/tsip/gis/caltrans_earth/overview.php

■ CALTRANS Post Mile System

Caltrans uses a post mile (PM) system to track highway mileage and to identify unique locations along the State Highway System. Postmiles start at the county line or from the beginning of a route. Postmile values increase from south to north or west to east depending upon the direction the highway follows within the state.

Post-mile locations can be identified installing Caltrans Earth, or by looking at roadside markers.

Download the Post-Mile Meta-data map layer or other data after installing Caltrans Earth.

http://www.dot.ca.gov/hq/tsip/gis/caltrans_earth/globe_content.php

Real-time and archived information is also available through Caltrans Performance Measurement System (PeMS) <http://pems.dot.ca.gov>

■ CALTRANS Traffic Data

The Traffic Data Branch is responsible for the collection and dissemination of historical volume and speed data. Traffic counts, also called traffic volumes, are available in various formats, and are only for the State Highway System. <http://traffic-counts.dot.ca.gov/>

Caltrans District 4

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